

A Project Report

on

Mini Project Portal

Submitted to

UKA TARSADIA UNIVERSITY

in

partial fulfillment for the degree of

BACHELOR OF TECHNOLOGY

in

Computer Engineering

by

Krutarth Parmar (201503100910012)

Varun Elavia (201503100910013)

Chirag Dangodara (201503100910018)

Krunal Badami (201503100910070)

Guided by

Mr. Parth Shah



છોટુભાઈ ગોપાલભાઈ પટેલ પ્રીયોગિકી સંસ્થાન, વારડોલી
Chhotubhai Gopalbhai Patel Institute of Technology, Bardoli

Department of Computer Engineering & Information Technology

Chhotubhai Gopalbhai Patel Institute of Technology

Uka Tarsadia University

Bardoli, Surat

November – 2018

CERTIFICATE

This is to certify that project work embodied in this report entitled "**Mini Project Portal**" was carried out by **Mr. Krutarth Parmar (201503100910012)**, **Mr. Varun Elavia (201503100910013)**, **Mr. Chirag Dangodara (201503100910018)** and **Mr. Krunal Badami (201503100910070)** in 7th semester, for partial fulfillment of **Bachelor of Technology in Computer Engineering** at Chhotubhai Gopalbhai Patel Institute of Technology, to be awarded by Uka Tarsadia University. This project work has been carried out under my supervision and is to my satisfaction.

Date:

Place: Bardoli, CGPIT



Mr. Parth Shah,
Assistant Professor,
CE & IT Department,
CGPIT, Bardoli

Ms. Purvi Tandel
Head,
CE & IT Department,
CGPIT, Bardoli

Dr. R. V. Patil
Director,
CGPIT, Bardoli

External Examiner
Signature

ACKNOWLEDGEMENT

We would like to express our deepest appreciation to all those who provided us the possibility to complete this report. A special gratitude we give to our Mini Project guide Mr. Parth Shah who has invested his full effort in guiding the team in achieving the goal.

We take special privilege of thanking our respected Head of the Department Ms. Purvi Tandel, for providing us the resources at institute during mini project sessions.

It is our radiant sentiment to place on record our deepest sense of gratitude to our Director of Institute Dr. Rajkumar Patil for stimulating suggestions and encouraging department to coordinate Mini Project as a subject. We appreciate the guidance given by Department Faculties as well as the jury panels especially in our project presentation that has improved our presentation skills thanks to their comment and advice.

Furthermore, many thanks go to our families for supporting us in our mini project and for appreciating our work. Last but not the least, thanks to all our friends for their suggestion and comments.

Krutarth Parmar (201503100910012)

Varun Elavia (201503100910013)

Chirag Dangodara (201503100910018)

Krunal Badami (201503100910070)

ABSTRACT

Mini Project Portal is a web application which help the faculty to manage and track the status of every student during the course of mini project. It includes various tasks like company verification, guide and jury allocation, marking system, report generation, chart overview, etc.

The system is applicable for B.Tech. program which consist of mainly three kind of user as administrator, faculties, students. Each can login with the given credentials. Administrator can control the verification of requested companies, allocation of guide and jury, manage the necessary information. Here the allocation of guide takes place on the basis of interest and domain. Student need to give all necessary details regarding his project. Guide can have the details of allocated students, he/she can evaluate the student on the basis of their performance.

Thus, with the help of Mini Project Portal all the major tasks of mini project can be performed seamlessly.

.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	iii
ABSTRACT	iv
LIST OF FIGURES	vii
LIST OF TABLES	viii
Chapter 1 Introduction	1
1.1 Background	1
1.2 Problem Definition	1
1.3 Motivation	1
1.4 Objective	2
1.5 Scope	2
1.6 Applications	2
Chapter 2 System Planning	3
2.1 Project Development Approach	3
2.2 System Modules	4
2.3 Functional Requirements	4
2.4 Non Functional Requirements	5
2.5 Technologies	5
2.6 Timeline Chart	6
Chapter 3 System Design	7
3.1 Database Schema	7
3.2 ER Diagram	9
3.3 Use Case Diagram	10
3.4 Sequence Diagram	11
3.5 Activity Diagram	13

3.6	Class Diagram	15
3.7	Data Flow Diagram	16
Chapter 4 Implementation and Testing		20
4.1	Implementation	21
4.2	Test Cases	27
Conclusion and Future Scope		28
References		29

LIST OF FIGURES

Figure 2.6: Timeline Chart	6
Figure 3.1.1: Database Schema(1)	7
Figure 3.1.2: Database Schema(2)	8
Figure 3.2: ER Diagram	9
Figure 3.3: Use Case Diagram	10
Figure 3.4.1: Sequence Diagram(1)	11
Figure 3.4.2: Sequence Diagram(2)	12
Figure 3.5.1: Activity Diagram(Student)	13
Figure 3.5.2: Activity Diagram(Faculty)	14
Figure 3.6: Class Diagram	15
Figure 3.7.1: DFD level 0(Student)	16
Figure 3.7.2: DFD level 1(Student)	16
Figure 3.7.3: DFD level 2(Student)	17
Figure 3.7.4: DFD level 0(Faculty)	18
Figure 3.7.5: DFD level 1(Faculty)	18
Figure 3.7.6: DFD level 2(Faculty)	19
Figure 4.1: Allocated group management	20
Figure 4.2: Total Marks analysis	20
Figure 4.3: Dates Management	21
Figure 4.4: Faculty Management	21
Figure 4.5: Permission of Faculties	22
Figure 4.6: CGPIT Mailer	22
Figure 4.7: Jury Evaluation	23
Figure 4.8: Notification Panel	24
Figure 4.9: Settings	24
Figure 4.10: Student report submission analysis	25
Figure 4.11: Dynamic Report generation	25
Figure 4.12: Charts	26

LIST OF TABLE

Table 2.1: Functional requirement	4
Table 4.1: Test cases	27

Chapter 1 Introduction

Mini Project Portal is a web application which can easily handle the Mini Project as a subject. It makes the work easy for faculties to manage and track the status of every student on the particular project in mini project. It includes various tasks like marking system, guide and jury allocation, comment analysis, report generation, charts overview, etc.

1.1 Background

The system is developed to overcome the various problems during mini project like allocating the guide and jury, student evaluation, jury and guide allocation and submission analysis, faculty management etc.

1.2 Problem Definition

Mini Project is a final year project for students of CE & IT department of C. G. Patel Institute of Technology. In this students need to make a project during their 7th semester. Various task are required to manage the mini project like allocating guide & jury, keep the track of student project, evaluating student, managing dates, managing faculties, analysis of jury and guide comments and their submissions and many more. Thus, Mini Project Portal is developed to reduce the manual workloads of the respective committee members or the faculties.

1.3 Motivation

A web-based application is any application that uses a website as the interface or front-end. Users can easily access the application from any computer connected to the Internet using a standard browser. Unlike traditional manual system, web systems are accessible anytime, anywhere and via any PC with an Internet connection.

Mini project portal is the system which is developed to overcome the various problems faced during handling of mini project of 7th semester students and to make the tasks simpler, easier and handy.

1.4 Objective

The main purpose is to make a software, which can easily handle the Mini project related tasks. At the end of the project the faculties and various committees of CE & IT department, C. G. Patel Institute of Technology, would easily able manage and track activities related to mini project.

1.5 Scope

- Administrator can control the verification of projects, allocation of guide and jury, manage the dates, marking criteria etc.
- System is applicable for B.Tech. 7th semester program.
- Jury can evaluate the allocated student on the basis of their presentation.
- Students can add, finalize, update and view details related to their project.
- Administrator can control the verification of projects, allocation of guide and jury for respective group of students, analyse marks and comments, manage faculty permissions and operation

1.6 Applications

Various applications of Mini Project Portal are as follows:

- Administrator have all rights to allocate jury and guide.
- Generating reports of necessary data in different format.
- This system in applicable to the CE & IT department of C. G. Patel Institute of Technology, where the tasks like allocation/deallocation of mini project groups to the faculties.
- This system is also facilitated with the marking system and the comment management.
- This system can also be used for generation various reports and tracking the activities of students through 7th semester mini project subject.

Chapter 2 System Planning

This chapter includes software model used in designing process of our project, various module and their requirements.

2.1 Project Development Approach

Each project need to be developed with software model which makes the project with high quality, reliable and cost effective. Our project is developed with the following software model,

- Spiral Model is a combination of a waterfall model and iterative model. Each phase in spiral model begins with a design goal and ends with the client reviewing the progress.
 - The development team in Spiral-SDLC model starts with a small set of requirement and goes through each development phase for those set of requirements. The software engineering team adds functionality for the additional requirement in every-increasing spirals until the application is ready for the production phase.
- As our system is specifically developed for our institute, it needed the continuous interaction with the department for their requirement and requirement may increases every time, So this can be easily followed by the planning phase of the Spiral model. Also the changes can be done in the system easily using spiral model. Continuous development by spiral model helps in risk management.
- Advantages of spiral model are as follows,
 - Additional functionality or changes can be done at a later stage.
 - Cost estimation becomes easy as the prototype building is done in small fragments.
 - Continuous or repeated development helps in risk management.
 - Development is fast and features are added in a systematic way.
 - There is always a space for customer feedback.

2.2 System Modules

Following are the main modules of the system.

- **Faculty Management**

- Track of Registered and remaining students
- Track and manage Allocated and Unallocated groups
- Guide/Jury allocation and submission analysis
- Marks analysis
- Date Management
- Evaluation by marks and comments of students by guide and jury
- Group registration and topic, domain, description finalisation
- Manage faculty profile and permissions

2.3 Functional Requirements

Table 2.1: Functional requirement

ID	Title & Description
FR1	<p>Title: Student registration, Student login</p> <p>Desc: The student should be able to register through the Website. The student must provide name, enrollment no, branch, email, semester, institute, contact number. Student can log in with the given credentials sent through mail.</p>
FR2	<p>Title: Guide allocation</p> <p>Desc: List of all faculty members is required along with their location for the guide allocation.</p>
FR3	<p>Title: Allocation status</p> <p>Desc: List the number of students allocated or unallocated. In the same way list of faculty allocated as guide or not is required.</p>
FR4	<p>Title: Guide comments</p> <p>Desc: Guide can give appropriate comments and marks to the respective students.</p>

FR5	<p>Title: Jury allocation</p> <p>Desc: Administrator is required to allocate the jury faculty for the presentation and also handle the group presentation.</p>
FR6	<p>Title: Report Generation</p> <p>Desc: Generating various report generation.</p>

2.4 Non Functional Requirements

- Portability: This application should be portable on any system.
- Security: The student and faculty who has user-name and password can only access their own account.
- Performance: This application requires internet connection.
- Reliability: The application is reliable since the data will be handled on AWS cloud platform and it should generate all the updated information in correct order.
- Serviceability: The system will provide a proper way of communication and feedback channel to the students and their guide.

2.5 Technologies

- Front end: HTML, CSS, Bootstrap, JavaScript, jQuery, AJAX
- Back end: PHP
- Library: FPDF, Chart.js
- Database: MySQL
- Server side Infrastructure: Ubuntu server on Amazon EC2
- Source/Version control: Bitbucket
- Email: Amazon Simple Email Service
- SMS: Amazon Simple Notification Service
- Domain and DNS: Freenom
- IDE: Visual studio code, Notepad++, Bitbucket online editor, Sublime Text
- Authentication: Amazon Cognito

2.6 Timeline Chart

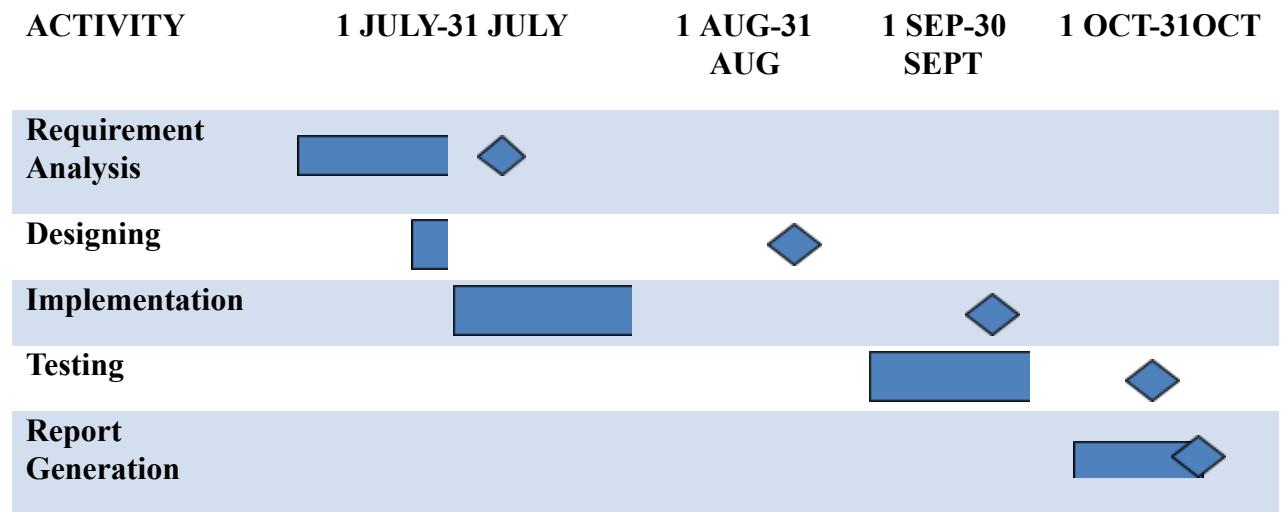


Figure 2.6: Timeline Chart

Chapter 3 System Design

The chapter 3 includes the brief detail of the database schema with of the system and various diagram used in the process of development.

3.1 Database Schema

Our main database schema includes FACULTY_POLICY, LOCATION, FACULTY, POLICY AND MAILED. This stores the necessary information regarding faculties.

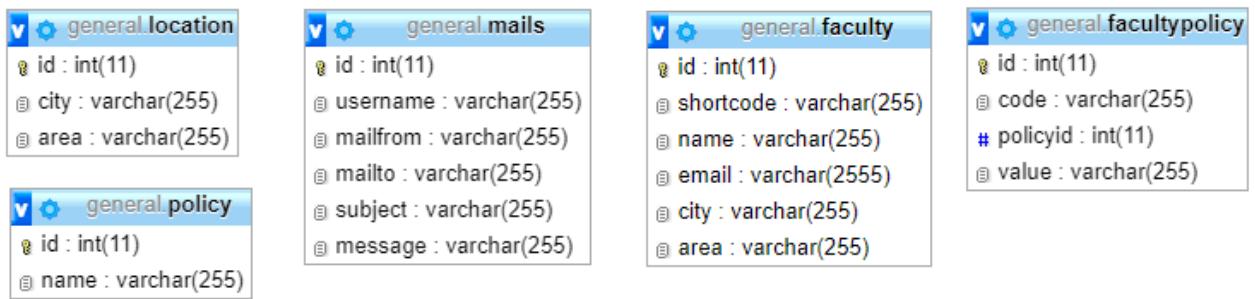


Figure 3.1.1: Database Schema

Other schema includes JURYMARKS, MARKS, COMMENTS which are used to store the information regarding evaluation by jury and guide. PROJECTS gives information regarding project. FEEDBACK stores the feedback given by guide and jury as well.

STUDENTS, ALLOCATION, REGISTRATION, STUDENTREGISTRATION, are schemas which are use to map various student with guide and jury at the time of verification, evaluation etc.

For faculty management, HELPERS and DATES schema is used.

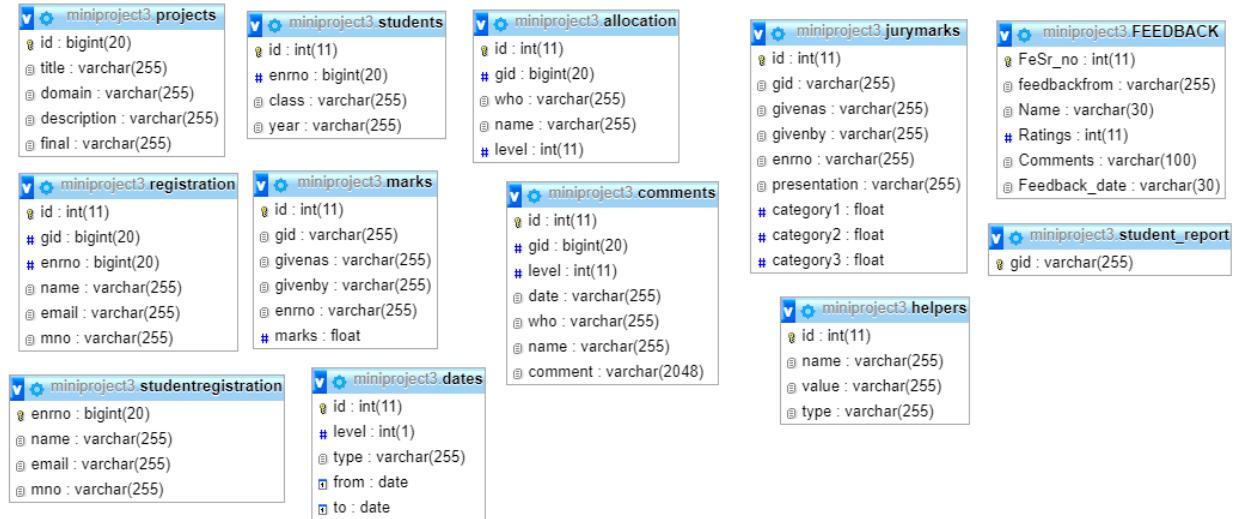


Figure 3.1.2: Database Schema

3.2 ER Diagram

ER Diagram shows the relation between different entities of the database. Our system includes various entities like Student, Administrator, Faculties. The relation between each entity are shown in the figure.

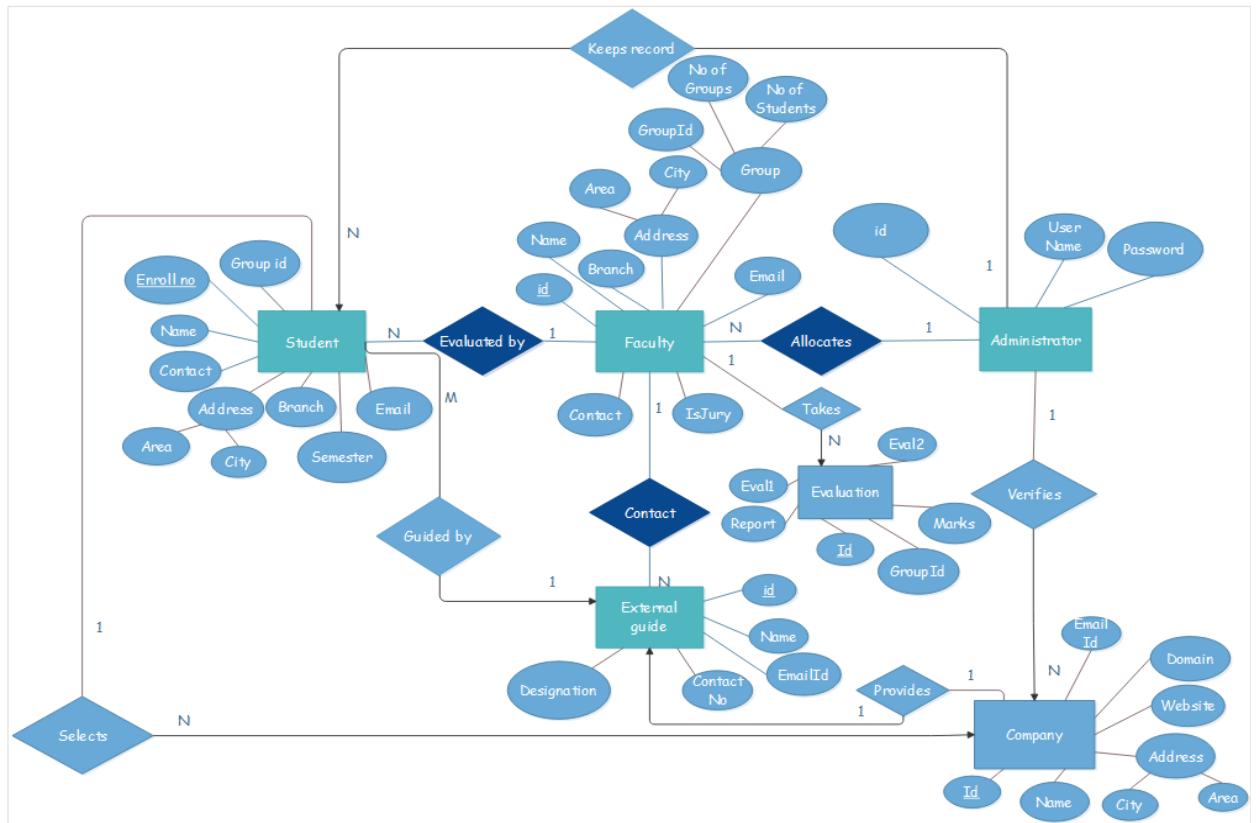


Figure 3.2.1: ER Diagram

3.3 Use Case Diagram

Use case diagram are referred to describe the action which the system can perform with the collaboration with other external users. Our system has three kind of user student, faculty and the admin.

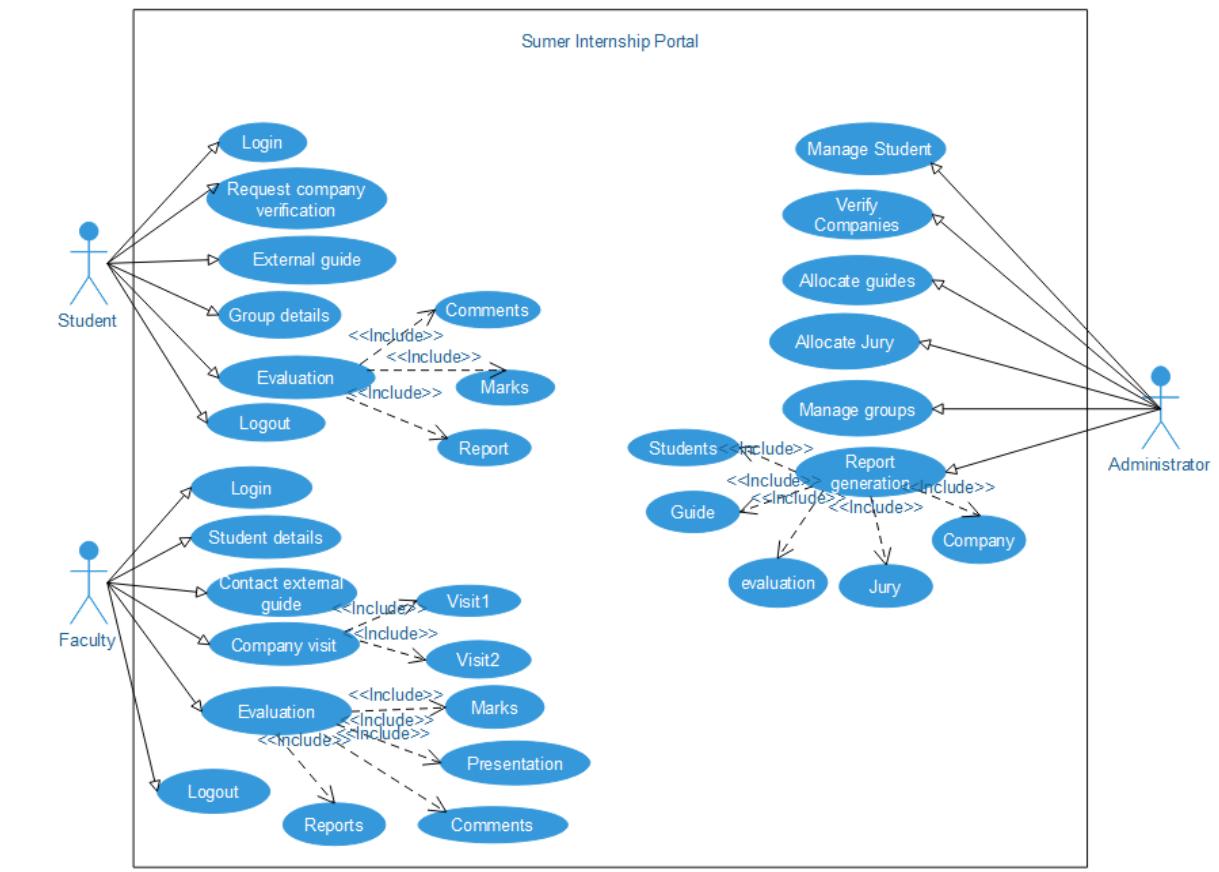


Figure 3.3: Use Case Diagram

3.4 Sequence Diagram

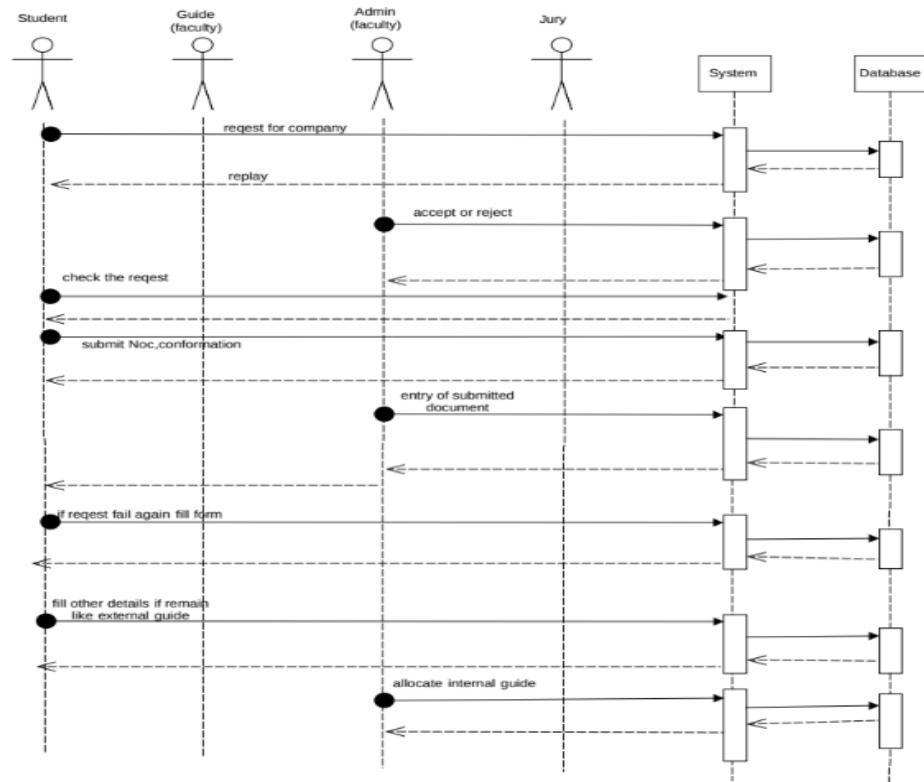


Figure 3.4.1: Sequence Diagram

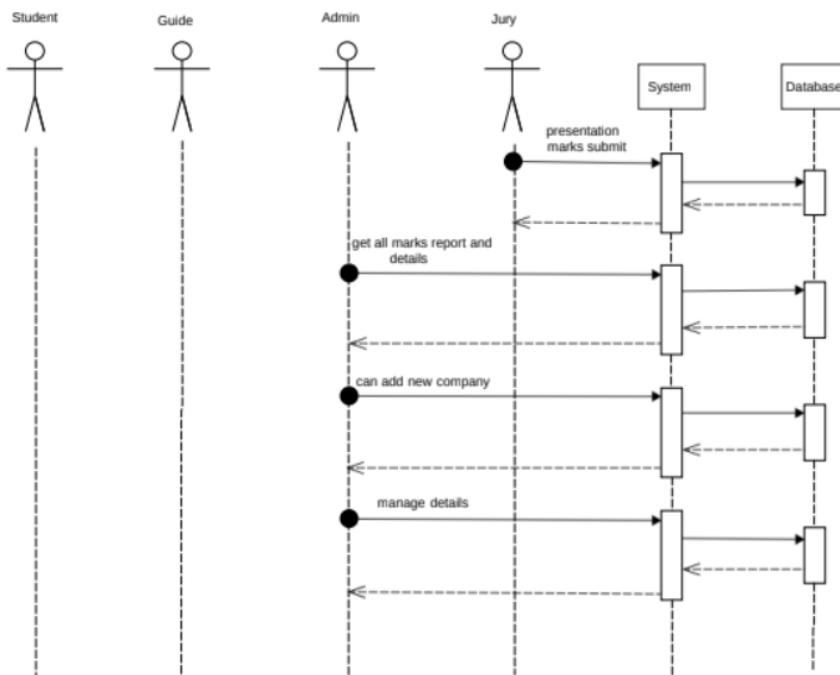
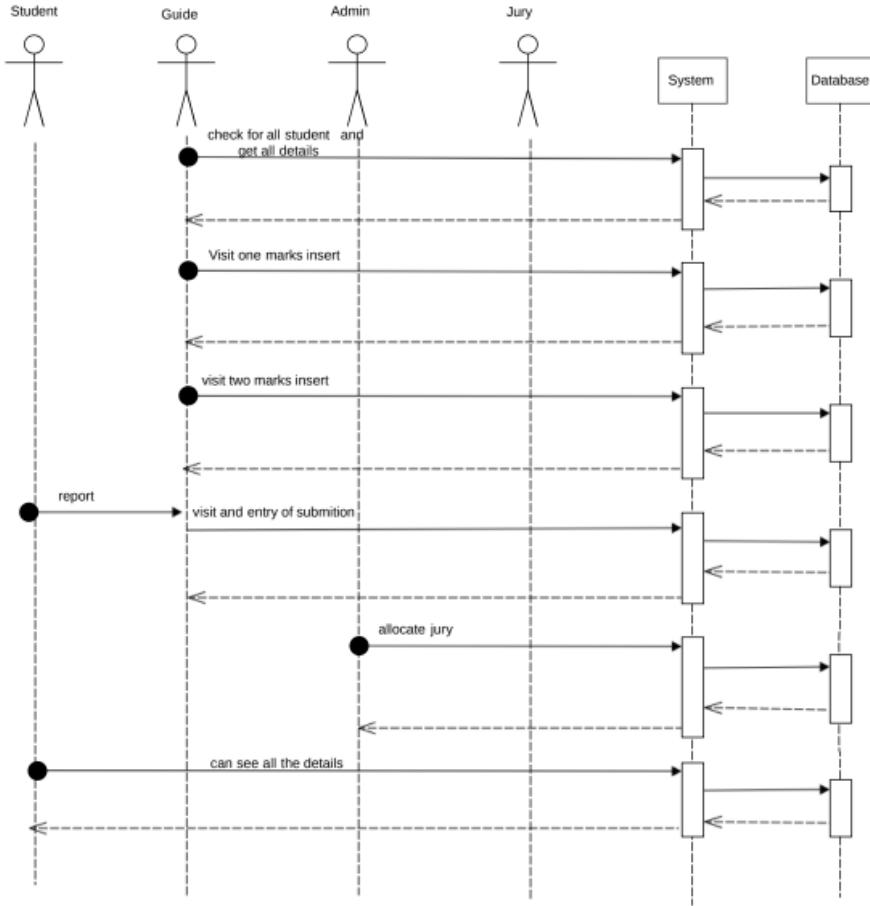


Figure 3.4.2: Sequence Diagram

3.5 Activity Diagram

Activity diagram is used to show the flow of activity of the user. Our system includes two activity diagrams for student and faculty.

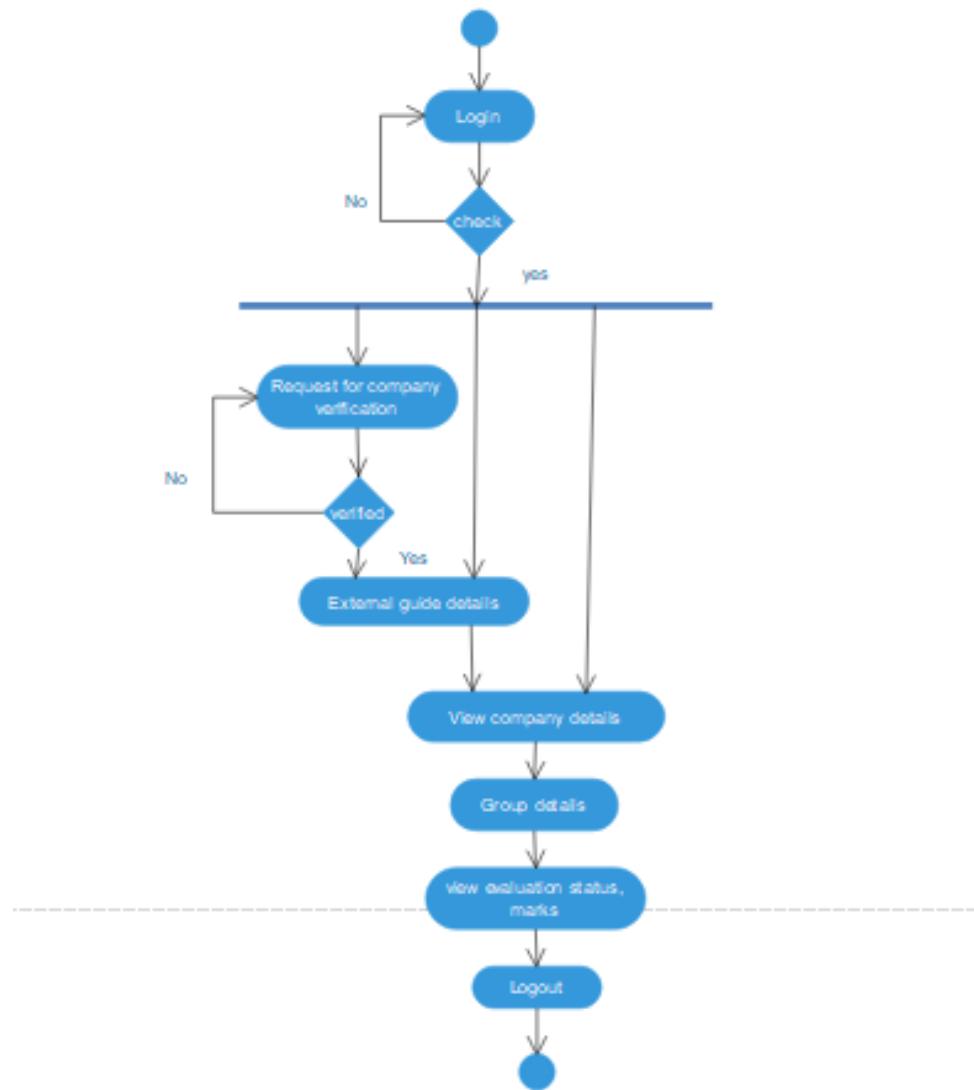


Figure 3.5.1: Activity Diagram (Student)

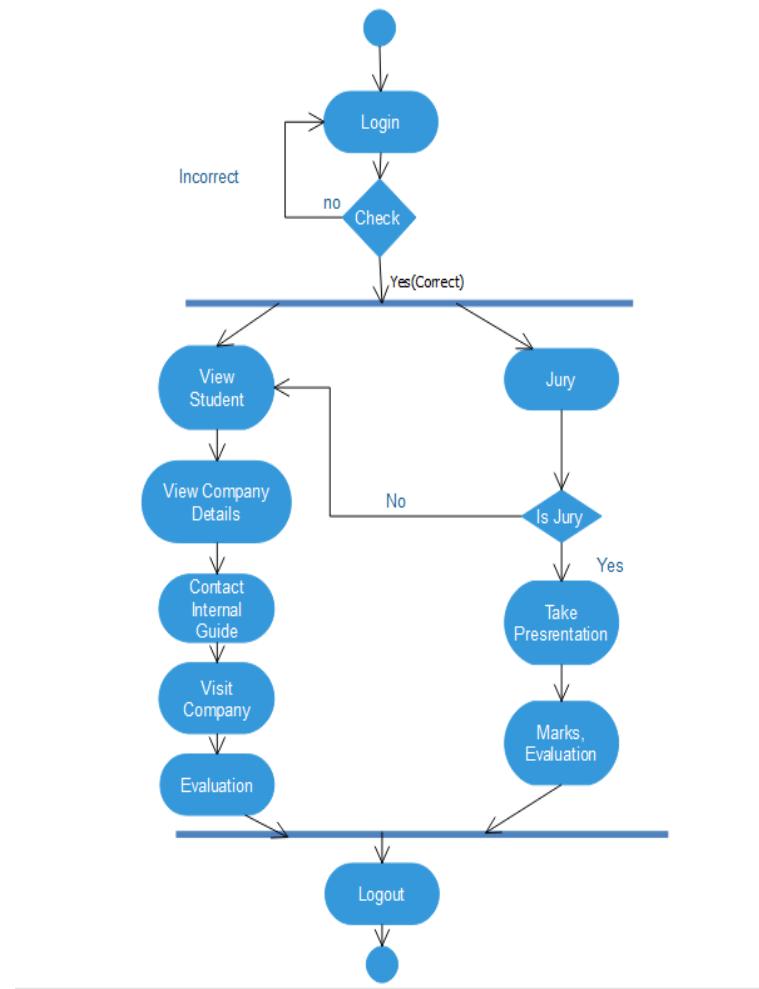


Figure 3.5.2: Activity Diagram (Faculty)

3.6 Class Diagram

Class diagrams are static structure diagram that describes the structure of a system by showing the system's classes, their attributes, and the relationships among objects. The relation between different classes are shown in figure:

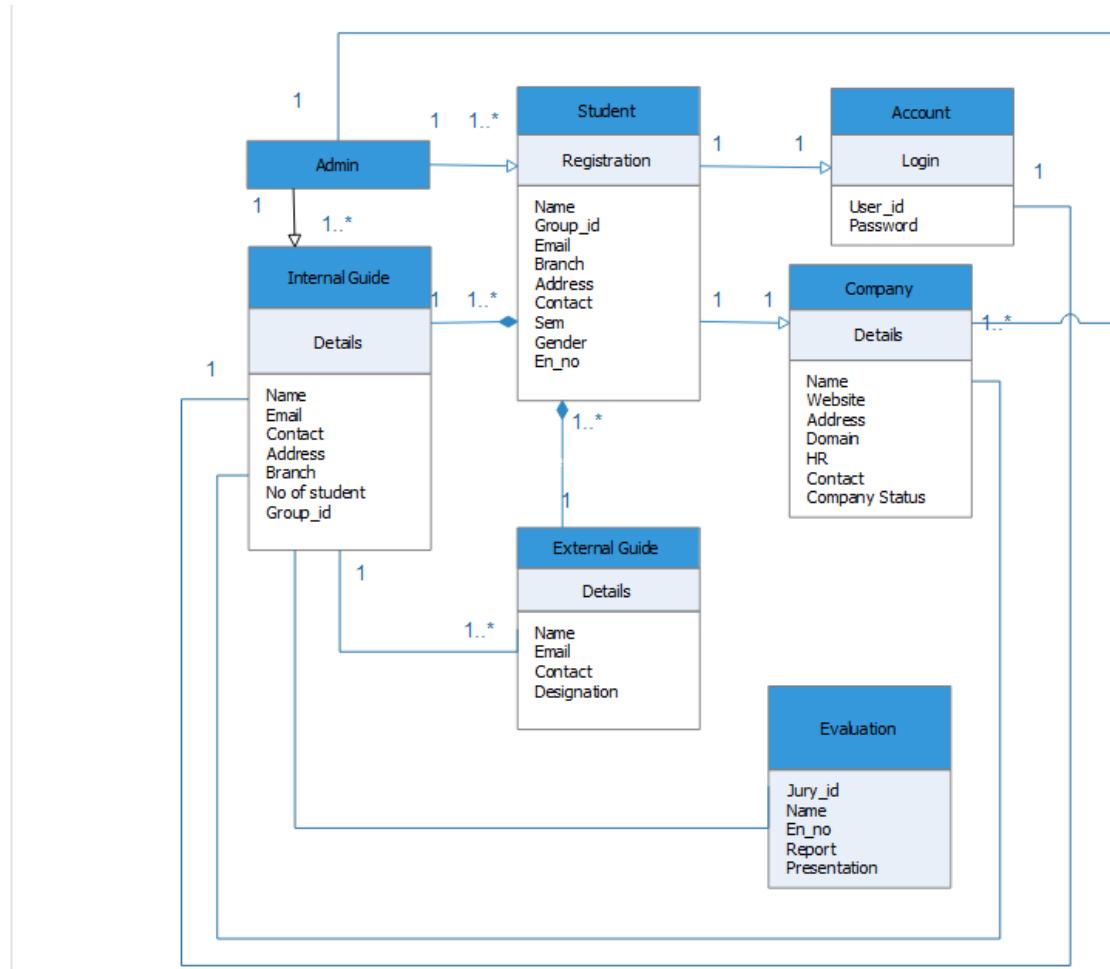


Figure 3.6: Class Diagram

3.7 Data Flow Diagram

A data flow diagram is a graphical representation of the "flow" of data through an information system, modelling its process aspects. Our system includes two different DFD diagram for student and faculty.

Student

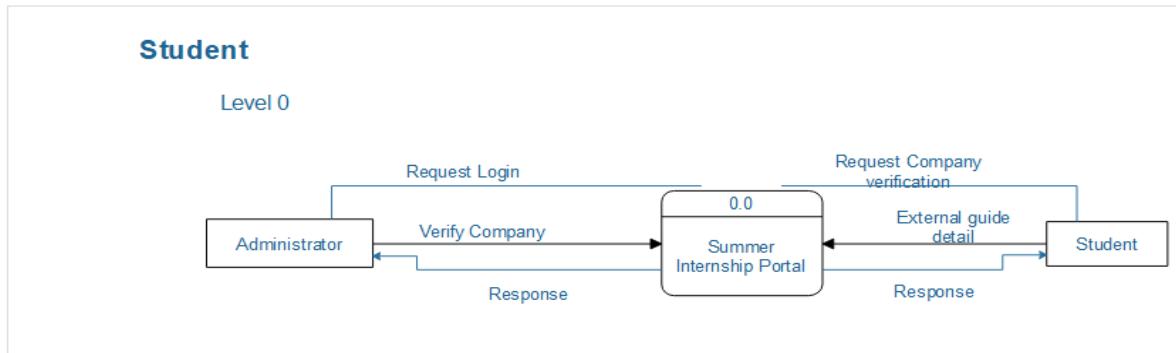


Figure 3.7.1: DFD level 0 (Student)

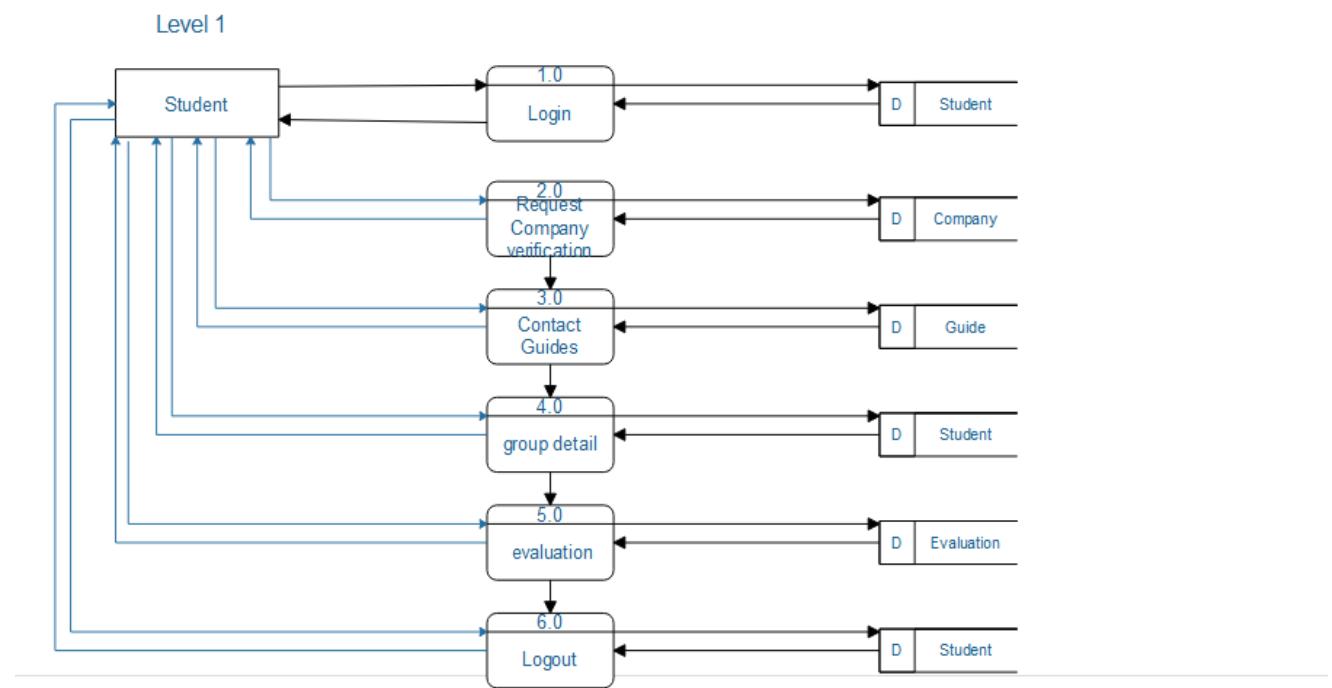
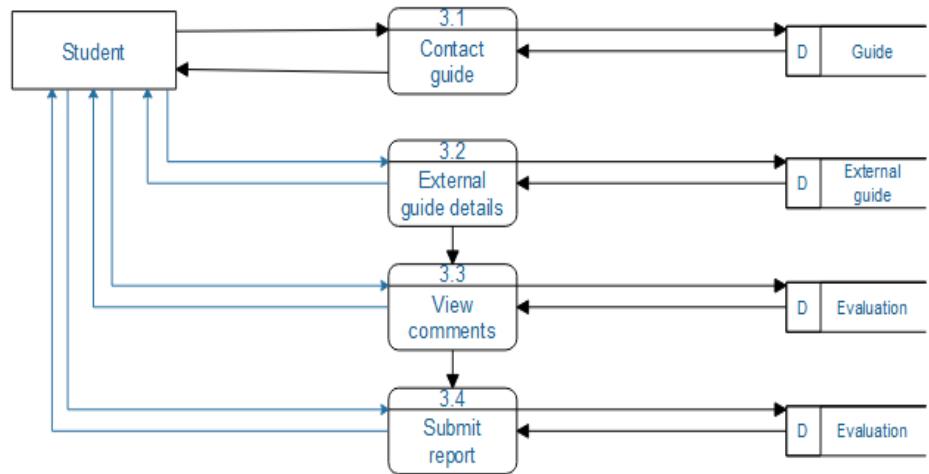


Figure 3.7.2: DFD level 1 (Student)

Level 2: Contact Guides(3.0)



Level 2: Evaluation(5.0)

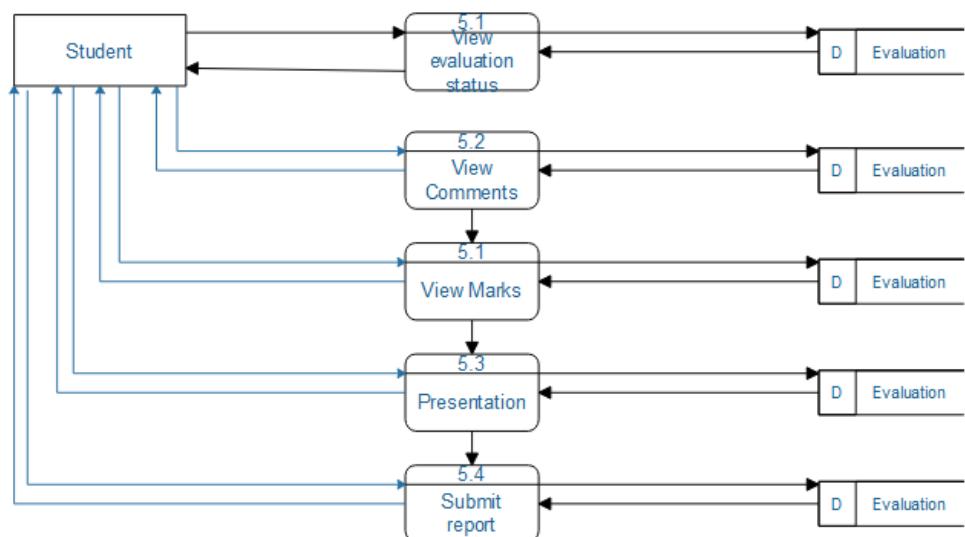


Figure 3.7.3: DFD level 2 (Student)

Faculty

Faculty

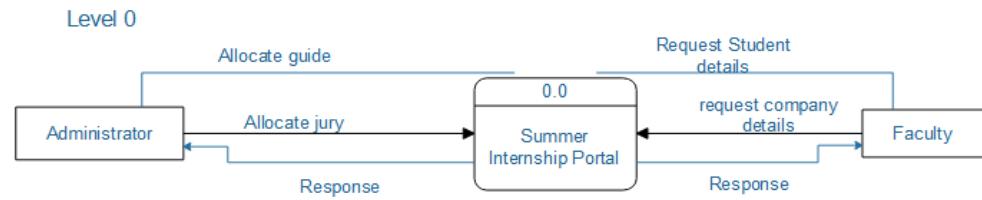


Figure 3.7.4: DFD level 0(Faculty)

Level 1

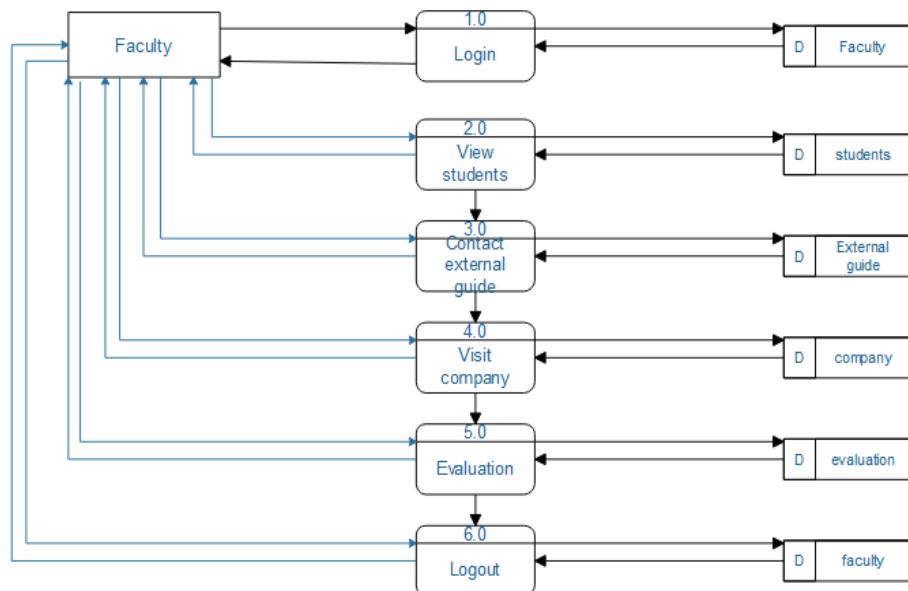


Figure 3.7.5: DFD level 1 (Faculty)

Level 2: Evaluation(5.0)

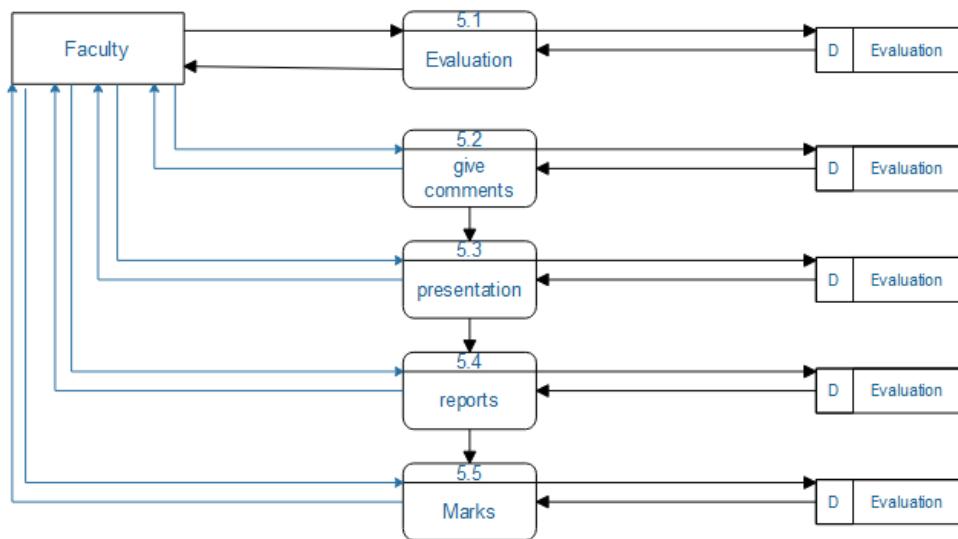


Figure 3.7.6: DFD level 2 (Faculty)

Chapter 4 Implementation and Testing

4.1 Implementation

➤ Allocated group management:

Student are allocated in a group and a seperated is assigned to the group based on the domain.

Class	Group Id	Project Title	Project Domain	Students	Guide	Jury	Final	Reset Guide	Reset Jury (1)	Reset Jury (2)
CE-A	201820191104	Cloudymate Hosting	Cloud Computing,	201503100910013-Varun Elavia, 201503100910012-Krutarth Parmar, 201503100910018-Chirag Dangodara, 201503100910070-Krunal Badami,	Prof. Varun Elavia,	Prof. Varun Elavia,	NO	<button>Reset Guide</button>	<button>Reset Jury</button>	<button>Reset Jury</button>

Figure 4.1: Allocated group management

➤ Total marks analysis:

Faculty can see the total marks of the students-wise and group-wise as well through a dashboard like marks for each presentation, marks given by guide and total marks.

Class	Enrno	Gid	Presentation 1 (15)	Presentation 2 (15)	Guide Marks (10)	Total (40)
CE-A	201403100910060	201820191127	0	6.75	7	13.75
CE-A	201403100910075	201820191127	0	6.75	5	11.75
CE-A	201503100910001	201820191117	12.5	10	7	29.5
CE-A	201503100910002	201820191108	10	11.5	8	29.5
CE-A	201503100910003	201820191105	13.5	14.5	10	38
CE-A	201503100910004	201820191105	13.5	14.5	10	38
CE-A	201503100910006	201820191115	11	15	7	33
CE-A	201503100910007	201820191117	10.5	10	7	27.5
CE-A	201503100910009	201820191118	10.5	10	7	27.5
CE-A	201503100910010	201820191112	10	7	7	24

Figure 4.2: Total marks analysis

➤ Dates management:

Date	From	To
31/08/2018	15/07/2018	05/08/2018
	06/08/2018	20/08/2018
	21/08/2018	05/09/2018
	06/09/2018	20/09/2018
	21/09/2018	05/10/2018
	06/10/2018	20/10/2018

Figure 4.3: Faculty dates management

➤ Faculty management

Prioiry	Name	Code	Email	Area	City
1	Prof. Devendra Thakor	DVT	devendra.thakor@utu.ac.in	Bardoli	Bardoli
2	Prof. Vibha Patel	VAP	vibha.patel@utu.ac.in		
3	Prof. Purvi Tandel	PHT	purvi.tandel@utu.ac.in		
4	Prof. Kinjal Mistree				
5	Prof. Rachna Patel				
6	Prof. Ankit Kharwar				
7	Prof. Fenil Khatiwala				

Figure 4.4: Faculty management form

➤ Permission for faculty

The screenshot shows the Simpidp application interface. On the left is a dark sidebar with a user icon and the text "administrator admin". Below it is a "MAIN NAVIGATION" section with links: "Mini Project", "Students", "Groups", "Guide", "Jury", "Marks Analysis", "Manage Dates", and "Faculty Management". The "Faculty Management" link is highlighted. The main content area has a red header bar with the title "Prof. Kinjal Mistree" and navigation links: "Home > Faculty Management > Prof. Kinjal Mistree". The main content area contains fields for "Priority" (1), "Name" (Prof. Kinjal Mistree), "Email - Id" (kinjal.mistree@uttu.ac.in), "Code" (KBM), "City" (Bardoli), and "Area" (Bardoli). Below these fields is a "Permissions" section with two columns of checkboxes. The first column includes: View Faculty Details, Update Faculty Details, Add New Faculty, View Faculty Permissions, View List of Remaining Students, View Guide Allocation Analysis, View List of Allocated Students, View Unallocated Students, Reset Allocated Group, View Jury Submission Report, View Total Marks, Manage Dates, View Guide Marks, and View Remaining Guide Marks. The second column includes: View List of Registered Students, Allocate New Group, View Jury Allocation Analysis, View Jury Marks, and View Remaining Jury Marks. At the bottom are three buttons: "Delete Faculty" (red), "Update Faculty Permissions" (orange), and "Update Faculty Details" (blue).

Figure 4.5: Permission based access

➤ CGPIT Mailer

The screenshot shows the CGPIT Mailer module. The left sidebar has a user icon and the text "administrator admin". Below it are links: "Enter faculty name" with a "GO" button, "MAIN NAVIGATION" with "Mini Project", "IDP/UDP", "Faculty Management", "Manage Notifications", and "CGPIT Mailer" (which is highlighted). The main content area has a blue header bar with the title "CGPIT Mailer" and navigation links: "Home" and "CGPIT Mailer". The main content area contains a "Send Mail" form with fields: "Select Sender" (administrator@cgpit.cf), "Select Recipient" (All faculties), "Subject" (Enter subject), and "Message" (Enter Message). Below the form is a "Send" button. At the bottom is a "Mail history" section with a table showing 10 entries, a "Search" input field, and a "Show 10 entries" dropdown.

Figure 4.6: Inbuilt mailing system

➤ Jury and guide evaluation

Evaluating on the basis of presentation, viva and implementation.

Simpidp									administrator
Group Id	Comment Count	Comment 1	Comment 2	Comment 3	Comment 4	Comment 5	Comment 6		
201720182118	3	✗	✓	✓	✗	✓	✗		
ID : 5	Name : Prof. Rachna Patel								
Group Id	Comment Count	Comment 1	Comment 2	Comment 3	Comment 4	Comment 5	Comment 6		
201720182108	2	✗	✗	✓	✓	✗	✗		
ID : 6	Name : Prof. Ankit Kharwar								
Group Id	Comment Count	Comment 1	Comment 2	Comment 3	Comment 4	Comment 5	Comment 6		
201720181302	3	✗	✓	✓	✓	✗	✗		
ID : 7	Name : Prof. Fenil Khatiwala								
Group Id	Comment Count	Comment 1	Comment 2	Comment 3	Comment 4	Comment 5	Comment 6		
201720182102	2	✗	✗	✓	✗	✓	✗		
Group Id	Comment Count	Comment 1	Comment 2	Comment 3	Comment 4	Comment 5	Comment 6		
201720182127	1	✗	✗	✗	✗	✓	✗		
ID : 8	Name : Prof. Vishvajit Bakrola								
Group Id	Comment Count	Comment 1	Comment 2	Comment 3	Comment 4	Comment 5	Comment 6		
201720182117	1	✗	✗	✓	✗	✗	✗		

Simpidp				administrator
Group Id	Sr No	Date	Comment	
201720182119				
	3	2018-08-23	The group of students met me for three times. Initially they would like to develop app for ceramic industry. Now they decided to develop android app for car rental system.	
	6	2018-10-20	They have developed an android app which has the functionality to display cars for rent. The user can add a car with rent in the app. Others can view the list of cars for rent.	
ID : 2 Name : Prof. Vibha Patel				
ID : 3 Name : Prof. Purvi Tandel				
Group Id	Sr No	Date	Comment	
201720182122				
	3	2018-08-24	Both the students, met once till date 24/8/2018. They have not yet finalized their project title at that time.	
	5	2018-09-25	Students have shown basic login, registration, package and places page. Though the designing of the website is very basic/general. They have submitted the SRS document on 25/9/2018, which will be verified on 25/9/2018. Students having presentation 26/9/2018 they came 25/9/2018 for showing project as well as sent SRS and PPT on 25/9/2018. Students need to work on designing as well as development side for the project.	
ID : 4 Name : Prof. Kinjal Mistree				
Group Id	Sr No	Date	Comment	
201720182118				
	2	2018-08-06	Comment 1: Finalized title, and modules to be incorporated are discussed.	

Figure 4.7: Evaluation page (Comments)

➤ Notifications

Faculty can give notification to other faculties and students

Name:	Value:	Type:	Action
(For student) Link to Report format (Mini Project)	https://drive.google.com/ope	Student	Update Delete
(For student) Link to Report format (Summer Internship)	https://www.google.com	Student	Update Delete
(For student) Link to Report format (IDP)	https://www.google.com	Student	Update Delete
(For student) Link to PPT format (Summer Internship)	https://www.google.com	Student	Update Delete
(For student) Link to PPT format (Mini Project)	https://www.google.com	Student	Update Delete
(For student) Link to PPT format (IDP)	https://www.google.com	Student	Update Delete
(For student) Link to SRS format (Mini Project)	https://www.google.com	Student	Update Delete
(For student) Presentation 2 Schedule	In the week of 24 to 29 septer	Student	Update Delete
(For faculty) Link to Report format (Mini Project)	https://drive.google.com/ope	Faculty	Update Delete

Figure 4.8: Notification Panel

➤ Settings

Maximum marks of Guide	10	Update
Maximum marks of Jury (Presentation)	5	Update
Maximum marks of Jury (Viva)	5	Update
Maximum marks of Jury (PU/PI)	5	Update

Figure 4.9: Faculty can change the setting for marks, jury and guide

➤ Student report submission analysis

Class	Group Id	Project Title	Guide	Status	Toggle Status
CE-A	201820191104	Portals for CGPIT.	Prof. Parth Shah	Not Submitted	<button>Submitted</button>
CE-A	201820191105	Summer Internship Portal	Prof. Supriya Pati	Not Submitted	<button>Submitted</button>
CE-A	201820191106	Gesture control Robot	Prof. Diya Vadhwani	Not Submitted	<button>Submitted</button>
CE-A	201820191107	Avoidance Game	Prof. Jenish Lavji	Not Submitted	<button>Submitted</button>
CE-A	201820191108	BookMyHall	Prof. Slesha Sanghvi	Not Submitted	<button>Submitted</button>
CE-A	201820191109	Help Desk System	Prof. Dhara Desai	Not Submitted	<button>Submitted</button>
CE-A	201820191110	CGPIT Material Portal	Prof. Diya Vadhwani	Not Submitted	<button>Submitted</button>
CE-A	201820191111	Student Evaluation System	Prof. Himani Parekh	Not Submitted	<button>Submitted</button>
CE-A	201820191112	Android Smart city traveller	Prof. Monali Gandhi	Not Submitted	<button>Submitted</button>
CE-A	201820191113	attendance system using face recognition	Prof. Achyut Sakadasariya	Not Submitted	<button>Submitted</button>

Figure 4.10: Guide allocation analysis

➤ Dynamic Report generation

Gives the final report of various kind in PDF as well as Sheet format.

#	Type of Report	Download PDF	View PDF	Download Sheet
1	Blank Marks Report (Class-Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
2	Blank Marks Report (Class-Wise) (Group Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
3	Filled Marks Report (Class-Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
4	Filled Marks Report (Class-Wise) (Group Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
5	Blank Comments Report (Class-Wise) (Group Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
6	Remaining Students (No Group allocation)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
7	Allocated Groups of Registered students (Admin Report) (Class-Wise) (Group Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
8	Unallocated Group (No Guide) (Class-Wise) (Group Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>
9	Guide Allocation (Group Details) (Priority-Wise) (Enr-Wise)	<button>Download PDF</button>	<button>View PDF</button>	<button>Download Sheet</button>

Figure 4.11: Report generation as a file

➤ Charts

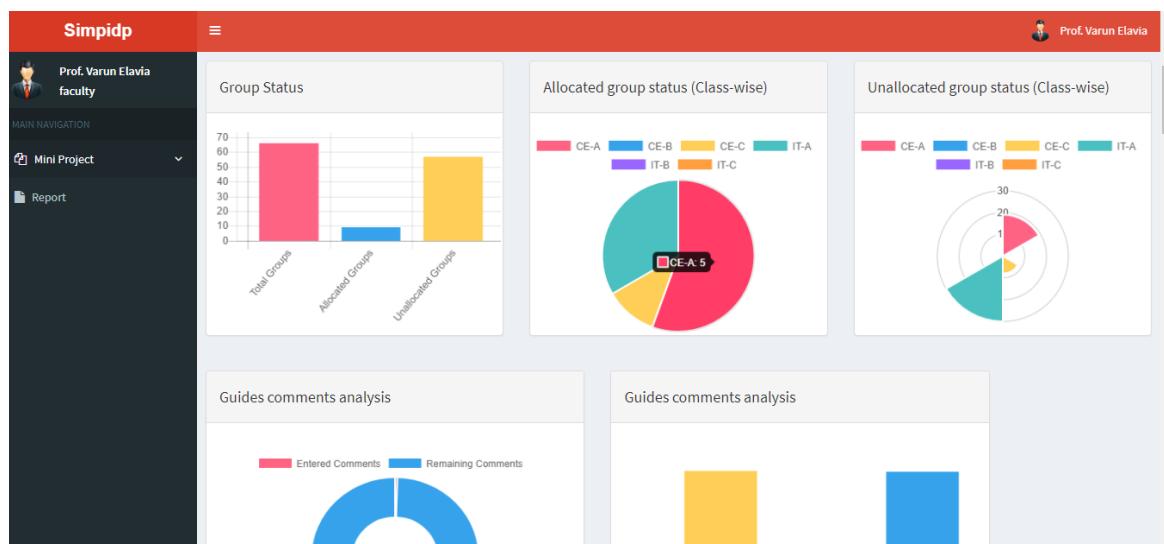
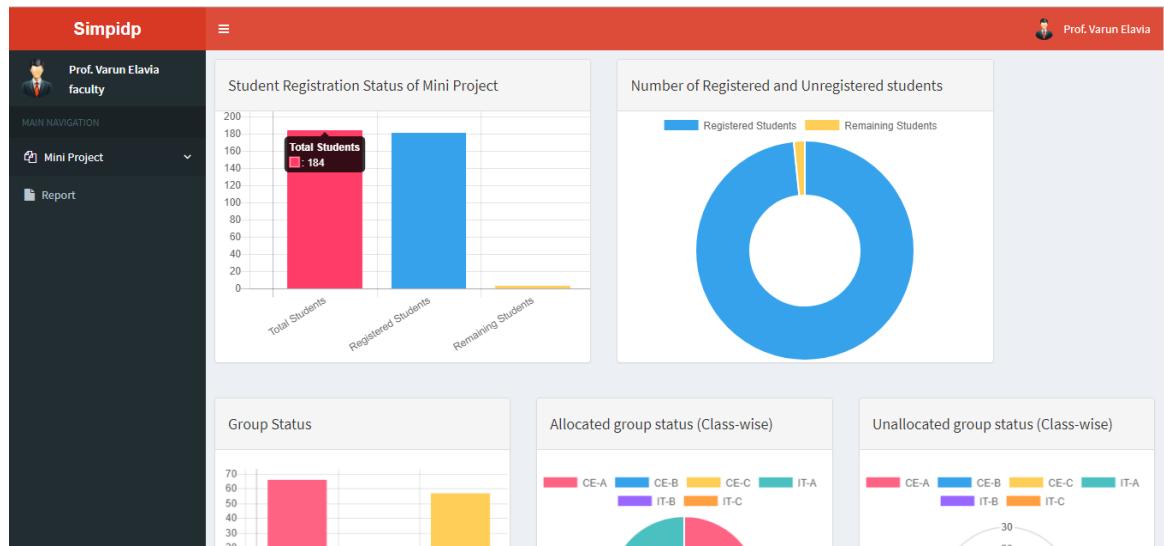


Figure 4.12: Displays the overview information through colourful charts

4.2 Test Cases

Table 4.1: Test cases

Test ID	Case	Test Data	Expected Result	Actual Result	Pass/Fail
1	Login	- Internet Connectivity - Login ID - Password	If Login ID & password is empty or invalid and No Internet connectivity then display Error message otherwise Login successfully	If Login ID & password is empty or invalid and No Internet connectivity then display Error message.	Pass
2	Allocation	Faculty details	If all the details are stated correctly and the faculty is not already allocated the display allocated successfully message otherwise error	If all the details are stated correctly and the faculty is not already allocated the display allocated successfully message otherwise error.	Pass
3	Marking	-Student detail	If all student details are correct and he/she is evaluated then update the marks	If all student details are correct and he/she is evaluated then update the marks	Pass
4	Report	Download view	If the requested format is available	If the requested format is available	Pass

Conclusion and Future Scope

Thus, Mini Project Portal provides a platform where multiple tasks could be managed and tracked. We have completed the implementation of allocation of guide and jury, guide/jury submission analysis, marks analysis and faculty management, now we are working for more report generation in different formats.

Further, this Mini Project portal will be integrated with summer internship and IDP portal. This combined system will be known as SIMPIDP.

At the later part, the system has to be completely migrated on the cloud platforms.

- The whole system would be highly reliable, available, secure, scalable and fault tolerant.
- The whole system would follow software automation process with multiple Continuous integration and development tools.
- Multiple systems like student subject selection, faculty subject selection, project selection for W.T. and S.E. subjects would be integrated.

References

Web references

[1] [Online]<https://www.w3schools.com/Jquery/default.asp>

[2] [Online]<https://github.com/sbilly/joli-admin>

[3] [Online]<https://adminlte.io/docs/2.4/installation>

1. W3School - jQuery is a JavaScript Library. It greatly simplifies JavaScript programming.

<https://www.w3schools.com/Jquery/default.asp>

2. Chart.js - An open-source charting and graph library

<http://www.chartjs.org/docs/latest/>

3. AdminLTE - An open-source administration template

<https://adminlte.io/docs/2.4/installation>

4. FPDF is a PHP class which allows to generate PDF files with pure PHP

<http://www.fpdf.org/>